

Definitions:

C = real annual coupon, payable semiannually = 3.375

i = real yield = 0.03650

n = number of full semiannual periods from issue date to maturity date = 19

r = number of days from settlement date to next coupon date = 91 (April 15, 1997, to July 15, 1997)

s = number of days in current semiannual period = 181 (January 15, 1997, to July 15, 1997)

Ref CPI_{January 15, 1997 (dated date)} = 158.43548

Ref CPI_{April 15, 1997} = 159.33333

SA = Settlement Amount

Resolution:

Index Ratio_{April 15, 1997} = Ref CPI_{April 15, 1997} / Ref CPI_{January 15, 1997} =
159.33333/158.43548 = 1.00567

$v^n = 1 / (1 + i/2)^n = 1 / (1 + 0.03650/2)^{19} = 0.70919562$

$a_n = (1 - v^n) / (i/2) = (1 - 0.70919562) / (0.03650/2) = 15.93448658$

$$P = \frac{(C/2) + (C/2)a_n + 100v^n}{1 + (r/s)(i/2)} - [(s-r)/s](C/2)$$

$$P = \frac{(3.375/2) + (3.375/2)(15.93448658) + 100(0.70919562)}{1 + (91/181)(0.03650/2)} - [(181-91)/181](3.375/2)$$

P = 97.752799

P = 97.753

P_{adj} = P x Index Ratio_{April 15, 1997}

P_{adj} = 97.753 x 1.00567 = 98.307260

P_{adj} = 98.307

A = [(181-91)/181] x 3.375/2 = 0.839088

A_{adj} = A x Index Ratio_{April 15, 1997}

A_{adj} = 0.839088 x 1.00567 = 0.843846

SA = P_{adj} + A_{adj} = 98.307 + 0.843846

SA = 99.150846

Note that, for the real price (P) and the inflation-adjusted price (P_{adj}), Treasury has rounded to three places. For accrued interest (A) and adjusted accrued interest (A_{adj}), Treasury has rounded to six places. These amounts are based on 100 par value.